REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on June 2, 2009.

Claims 1-60 are now pending in this application.

Claims 25-37 were allowed by the Examiner. No changes have been made to these allowed claims and these claims remain allowable.

Objection was made to the form of Claims 5-7, 13, 14, 16, 17, 20, 22-24, 41, 44, 45, 49, 54, 56 and 58. Claims 5, 13, 16, 20, 22, 23, 41, 44, 49, 54, 56 and 58 have been re-written as requested by the Examiner to include all of the limitations of the base claim and any intervening claims and all of the claims subject to an Examiner objection are now in allowable form. Claims 18 and 19, which were rejected by the Examiner, have been amended to depend on claim 16. Claim 16 has been amended to remove the objections raised by the Examiner and is now allowable. Claims 18 and 19, dependent on allowable claim 16, are also allowable.

Claims 1-4, 8-12, 15, 21, 38-40, 42, 43, 46-48, 50-53, 55 and 57 were also rejected by the Examiner. Claims 1, 8, 9, 10, 12, 18, 19, 38-40, 46, 51-53, 55 and 57 have been amended as described below to address the Examiner's basis for rejection and to more clearly describe another aspect of Applicant's invention.

Claims 59 and 60 have been added as dependent claims to Claim 1.

§ 102 Rejection of the Claims

Claims 38-40, 42-43 and 46 were rejected under 35 USC §102(e) as being anticipated by Wilson et al. (U.S. Patent No. 6,714,976).

> *As per claim 38, Wilson teaches a real time self monitoring computing station, including: a primary processor disposed at a computing station (column 5, lines 27-30); a detector array at the computing station, including at least one detector adapted to*

continuously sense a current computer component performance at the computing station and generate a detector signal indicating the sensed condition (column 5, lines 27-30); a controller coupled to receive the detector signal from each detector of the array, and adapted to generate a computer component performance signal corresponding to each detector signal; a performance information generator coupled to receive each performance signal and adapted to generate performance information including a condition information entry based on each received performance signal (column 6, lines 1-14); a memory at the computing station including a first memory sector for storing address information identifying the computing station, a second memory sector for dynamically storing the performance information, and a third memory sector for storing an acceptance standard corresponding to each condition information entry; and a comparator coupled to the second and third memory sectors, adapted to compare each condition information entry with its corresponding acceptance standard and generate a fault indication responsive to each failure of a condition information entry to satisfy the corresponding acceptance standard (column 11, line 66 – column 12, line 9); wherein the performance information generator further is adapted to present a performance record including the address information and the performance information for retrieval by a remote monitoring station, in response to receiving a cue from the monitoring station (column 7, lines 58-65; column 5, lines 16-18; column 16, lines 9-23).

As per claim 39, Wilson teaches the computing station of claim 38 wherein: the detector array includes a plurality of detectors for detecting different performances, and the performance information includes a plurality of performance information entries individually related to the different performance (column 5, lines 27-35).

As per claim 40, Wilson teaches the computing station of claim 39 wherein: each of the condition records includes performance information entries corresponding to all of the different conditions (column 5, lines 27-35).

As per claim 42, Wilson teaches the system of claim 39 wherein: each of the acceptance standards consists essentially of one of the following: a maximum value, a minimum value, and a range of values (column 11, line 66 – column 12, line 11).

As per claim 43, Wilson teaches the computing station of claim 38 wherein: the controller operates independently of the primary processor (column 6, lines 1-14).
As per claim 46, Wilson teaches a process for monitoring real time computer component performances at a plurality of remote

computing stations, independent of the operating systems of the monitored computing systems (column 16, lines 9-23), including: providing a detector array at each of a plurality of remote computing stations, and using each detector of each array to continuously sense a current computer component performance at the associated station; using a controller at each station to receive a detector signal from each detector of the associated array, and to generate a condition signal corresponding to each detector signal (column 5, lines 27-42), generating performance information at each computer station including a performance information entry corresponding to each performance signal; assembling the performance information at each station, along with address information identifying that station, into a performance record associated with that station; sending a cuing signal from a monitoring computer to each of the remote computing stations (column 6, lines 1-14); responsive to receiving the cuing signal at each remote station, presenting the current performance record associated with that station for retrieval by the monitoring computer; and using the monitoring computer to retrieve the presented performance records (column 16, lines 9-23).

§103 Rejection of the Claims

Claims 1-4, 8-12, 15, 18, 21, 47, 48, 50, 51-53, 55 and 57 were rejected under 35 USC § 103(a) as being unpatentable over Wilson in view of Wookey (U.S. Patent No. 6,023,507).

As per claim 1, Wilson teaches a system for monitoring computer component performance at a plurality of computing stations remote from a monitoring station, independent of the operating systems of the monitored computing systems (column 16, lines 9-23),wherein each computing station includes a primary processor and a chassis housing the primary processor; said system including: a plurality of detector arrays, each of the arrays located at a different one of a plurality of computing stations, each detector array including at least one detector adapted to continuously sense a computer component performance at the associated computing station and generate a detector signal indicating the then currently sensed performance (column 5, lines 27-30); a plurality of controllers, each of the controllers located at an associated one of the computing stations and operatively coupled to the associated detector array to receive the detector signal from each detector of the associated array and generate a computer component performance signal corresponding to each received detector signal; a plurality of condition information generators, each

condition information generator located at an associated one of the computing stations, coupled to receive each associated condition signal, and adapted to generate condition information including a condition information entry based on each received condition signal (column 6, lines 1-14); a computing station memory at each computing station adapted to receive the associated current performance information, including a first memory sector for storing address information identifying the associated computing station, and a second memory sector for continuously storing the associated current performance information (column 7, lines 37-65); wherein each performance information generator further is adapted to present an immediately retrievable current performance record including the address information and the condition information for retrieval by a monitoring station, in response to receipt of a cue from the monitoring station (column 7, lines 58-65; column 5, lines 36-38; column 16, lines 9-23); and a monitoring station remote from the computing stations and communicatively coupled to the computing stations, including a monitoring station processor (column 4, lines 55-65); a monitoring component for generating cues and sending the cues to the selected computing stations, and an image generator adapted to generate visible images of the performance records presented in response to the cues and retrieved by the monitoring station (column 16, lines 9-47). Wilson does not explicitly teach a selection component for individually selecting different ones of the computing stations, Wookey does teach a selection component for individually selecting different ones of the computing stations (column 8, lines 31-51; column 9, lines 4-6; column 14, lines 7-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the process of Wookey in the process of Wilson. One of ordinary skill in the art would have been motivated to use the process of Wookey in the process of Wilson because Wookey teaches his invention to be beneficial in the remote monitoring of distributed systems (column 1, lines 16-17); an explicit desire of Wilson (column 1, lines 15-20).

As per claim 2, Wilson teaches wherein: the monitoring component comprises computer software in the form of a monitoring program resident in the monitoring station processor, adapted to generate and send cues in accordance with selection input from the selection component (column 16, lines 9-47).

As per claim 3, Wilson teaches the system of claim 2, wherein: the selection component comprises an operator-controlled device linked to the monitoring station processor and configured to allow a system user to control said selection input (column 16, lines 42-47).

As per claim 4, Wilson teaches the system of claim 2, wherein: the monitoring station further includes a memory segment for storing computing station address information comprising a list of addresses identifying the computing stations, and said selection component comprises computer software in the form of a selection program operatively associated with the monitoring program and the first memory segment to select the computing stations from the list of addresses (column 16, lines 42-47).

As per claim 8, Wilson in view of Wookey teaches the system of claim 1. Wilson teaches wherein: each of the detector arrays includes a plurality of detectors for detecting different conditions, and the condition information generated by each condition information generator includes a plurality of condition information entries individually relating to the different conditions (column 6, lines 1-14).

As per claim 9, Wilson teaches the system of claim 8, including: an evaluation component for determining, with respect to each of the condition entries, the presence of a fault (column 11, line 66 – column 12, line 9).

As per claim 10, Wilson teaches the system of claim 9, wherein: each of the computing station memories further includes a third memory sector for storing acceptance standards individually associated with the conditions, and the evaluation component includes a comparator coupled to the second and third memory sectors at each computing station for individually comparing the acceptance standards with the condition information entries and generating a fault indication responsive to each failure of a condition information entry to satisfy the associated acceptance standard (column 11, line 66 – column 12, line 9).

As per claim 11, Wilson teaches the system of claim 10, wherein: each of the acceptance standards consists essentially of one of the following: a maximum value, a minimum value, and a range of values (column 11, line 65 - column 12, line 9).

As per claim 12, Wilson teaches the system of claim 10, wherein: each of the condition information entries consists essentially of one of: a value associated with the detected condition; a fault indication; and a combination of the value and the fault indication (column 11, line 66 – column 12, line 9).

As per claim 15, Wilson in view of Wookey teaches the system of claim 1. Wilson teaches wherein: each of the controllers operates independently of its associated primary processor (column 6, lines 1-14).

As per claim 18, Wilson teaches the system of claim 1, wherein: each of the condition information generators comprises a

computer program resident in a data storage environment near the associated controller, and the first sector of each computer station memory is resident in said data storage environment (column 6, lines 1-14).

As per claim 21, Wilson teaches the system of claim 1, wherein: the selection component comprises computer software in the form of a selection program resident in the associated monitoring station processor (column 8, lines 31-51).

As per claim 47, Wilson teaches the process of claim 46. Wookey teaches it further including: entering a list of the remote computing stations into the monitoring computer, and causing the computer to send the cuing signals in a sequence to the remote computing stations on the list (column 5, lines 43-49; column 8, lines 31-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the process of Wookey in the process of Wilson. One of ordinary skill in the art would have been motivated to use the process of Wookey in the process of Wilson because Wookey teaches his invention to be beneficial in the remote monitoring of distributed systems (column 1, lines 16-17); an explicit desire of Wilson (column 1, lines 15-20).

As per claim 48, Wilson teaches the process of claim 47. Wookey teaches it further including: using a computer program resident in the monitoring computer to cause multiple repetitions of said sequence (column 5, lines 43-49).

As per claim 50, Wilson teaches the process of claim 47. Wookey teaches wherein: entering the list comprises using an operator-controlled input device coupled to the monitoring computer (column 8, lines 31-51).

As per claim 51, Wilson teaches the process of claim 46. Wookey teaches wherein: each detector array includes a plurality of detectors, whereby the condition information associated with each remote computing station includes a plurality of condition information entries (column 3, lines 34-61).

As per claim 52, Wilson teaches the process of claim 51, further including: maintaining a list of acceptance standards associated with each remote computing station, comparing the acceptance standards with the associated condition information entries in a one-to-one correspondence, and generating a fault indication responsive to each failure of a condition information entry to satisfy the associated acceptance standard (column 11, line 66 – column 12, line 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the process of Wilson in the process of Wookey. One of ordinary skill in the art would have been motivated to use the process of

Wilson in the process of Wookey because Wilson teaches his invention to be beneficial in the remote monitoring of distributed systems (column 1, lines 15-20); an explicit desire of Wookey (column 1, lines 16-17).

As per claim 53, Wilson teaches the process of claim 52, wherein: said comparing the acceptance standards with the associated condition information entries is performed at each of the remote computing stations (column 11, line 66 – column 12, line 9).

As per claim 55, Wilson teaches the process of claim 52 further including: generating visible images of the retrieved condition records (column 16, lines 9-42).

As per claim 57, Wilson teaches the process of claim 52. Wookey teaches it further including: generating a warning at the monitoring computer in response to retrieving a condition information entry that includes a fault indication (column 4, lines 36-45).

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Wookey in further view of Microsoft Computer Dictionary (MCD).

As per claim 19, Wilson in view of Wookey teaches the system of claim 1. Wilson teaches wherein: the selection component, the monitoring component and the image generator comprise computer programs resident in the monitoring station processor (column 6, lines 1-14; column 5, lines 62-66). Wilson does not teach the monitoring station memory includes a plurality of registers resident in the monitoring station processor. MCD does teach registers (page 379). It would have been obvious to one of ordinary skill in the art to use the register processor of MCD in the process of Wilson. One of ordinary skill in the art would have been motivated to use the register processor of MCD in the process of Wilson because MCD teaches the registers to hold certain data; an explicit desire of Wilson (column 4, lines 59-61).

ARGUMENT

Allowable Subject Matter

Claims 25-37 were allowed by the Examiner and remain unchanged. Applicant would like to thank Examiner McCarthy for allowing Claims 25-37.

Claims 25-37 were allowed for two reasons. The first reason given by the Examiner is that the claims recite the limitation that the *monitoring station is independent of the operating systems of the monitored systems*. The second reason given by the Examiner is unclear. It appears that a line or some words may be missing from paragraph 11 of the Examiner's Office Action.

Examiner Objections

Claims 5-7, 13-14, 16-17, 20, 22-24, 41, 44-45, 49, 54, 56 and 58 were objected to as being dependent upon a rejected base claim, but were identified as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 5, 13, 16, 20, 22, 23, 41, 44, 49, 54, 56 and 58 have been amended as requested by the Examiner and are now allowable. Claims 6, 7, 14, 17, 24 and 45 are dependent on amended and now allowable claims and therefore are allowable as well. Applicant would like to thank Examiner McCarthy for allowing these claims.

In response to the latest office action, Applicants have amended rejected Claims 1-4, 8-12, 15, 21, 38-40, 42, 43, 46-48, 50-53, 55 and 57 to emphasize the following differences between Applicant's invention and the prior art:

1) Applicant's invention operates independently of the monitored computer's processor or operating system. This was the basis for the Examiner allowing claims 25-37. Claims 1-4, 8-12, 15, 21, 38-40, 42, 43, 46-48, 50-53, 55 and 57 now include this limitation.

2) Applicant's system is useful for measuring conditions in the computer chassis, such as power supply voltages and status, chassis fan RPMs and chassis temperatures, not just computer component performance. Claims 1-4, 8-12, 15, 21, 38-40, 42, 43, 46-48, 50-53, 55 and 57 now include this limitation.

Both Wookey and Wilson disclose monitoring systems that *operate beneath an operating system*. As noted by the Examiner, Wookey and Wilson monitor the *system performance of the computer components*, such as the computer processor performance and the operation of the network devices (disks, files system devices and tape). If the monitored computer completely

fails or is in "OFF" mode, it is not possible using the Wookey or Wilson monitoring systems to retrieve operational data from the monitored computer components.

In contrast, Applicant's monitoring system can monitor computer *chassis component conditions* regardless of the presence of an operating system, processor, or any computer components in the monitored computer because Applicant's system independently monitors the *conditions in the computer chassis, such as the power supply voltages and status, chassis fan revolutions per minute and status and chassis and computer component temperatures.* Because Applicant's monitoring system operates independently of the operating systems or processor of the monitored computers, the *chassis component conditions* of the monitored computer are always available to the monitoring computer, even if the computer is off or the processor or operating systems are inoperable.

The data collected with Applicant's system is useful to identify what is going on inside the computer chassis. Computer components are sensitive to heat. To protect the integrity of the computer components inside a computer chassis, it is important to monitor the chassis components, including without limitation, fan operation, power supply voltages, and chassis component temperatures to confirm they are within an acceptable range.

Applicant has revised Claims 1-4, 8-12, 15, 21, 38-40, 42, 43, 46-48, 50-53, 55 and 57 to emphasize the chassis condition monitoring capability of the present invention. Neither Wookey nor Wilson discloses the use of a chassis condition monitoring system that operates independently of the processor and operating systems of the monitored computer.

Given that the Examiner has already allowed claims 25-37 because the claims recite the limitation that the *monitoring station is independent of the operating systems of the monitored systems*, which limitation has now been added to all of the rejected claims, and that Applicant has further limited these claims to cover a system for monitoring *chassis conditions*, Applicant believes Claims 1-4, 8-12, 15, 21, 38-40, 42, 43, 46-48, 50-53, 55 and 57 are in condition for allowance and allowance is respectfully requested.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's below listed attorney at (612) 877-5282 to facilitate prosecution of this matter.

Applicant respectfully requests an interview and will be contacting the Examiner to arrange an interview to discuss the claims as amended.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Payment of the newly added independent and dependent claims has been authorized. Please charge any additional fees or credit overpayment to Deposit Account No. 50-2442.

Respectfully submitted,

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